

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1.(Original) An apparatus comprising a receiving device
2 working with space diversity for signals modulated with spreading
3 code coefficients in time and for signals received over at least
4 two channels, the receiving device comprising a mixer circuit and a
5 spreading code demodulation circuit in the form of demodulation
6 branches which have code inputs, characterized in that the mixer
7 circuit shifts the phase of the signals of one of the channels,
8 whereas the code inputs of one of the branches receive the
9 spreading code and the inputs of at least another branch receive
10 the conjugate spreading code.

1 2.(Original) An apparatus as claimed in claim 1,
2 characterized in that the received signals before being mixed are

3 broken down into complex signals and in that the mixer circuit has
4 a mixing input for reversing the imaginary part of one of the
5 received signals.

1 3. (Previously Presented) An apparatus as claimed in claim 1,
2 characterized in that a combining circuit is provided for combining
3 the signals of the two branches.

1 4. (Previously Presented) A processing method for signals
2 received over various channels, implemented in a system as claimed
3 in claim 1 and having been subjected to a time diversity via a
4 spreading code formed by code elements which appear in a complex
5 form, characterized in that it comprises the following steps:
6 - reception of signals over at least two channels,
7 - mixing of signals of each one of the channels by a local
8 oscillator to reverse the phase of the signals of one of the
9 channels,
10 - demodulation of the signals by means of a first
11 demodulation branch which operates with said non-conjugate

12 spreading code elements and at least a second demodulation branch
13 operating with said conjugate code elements,
14 - combining signals supplied by the two branches to
15 reconstruct the thus transmitted data.